

OGDEN ARSENAL, IGLOO TYPE MAGAZINE
(OGDEN ARSENAL, BUILDING 1398)
(OGDEN ARSENAL, BUILDING 398)
(OGDEN ARSENAL, MUNITIONS STORAGE)
Sycamore Lane, south of Georgia Street
Layton Vicinity
Davis County
Utah

HAER No. UT-84-Y

HAER
UTAH
6-LAY. V,
1Y-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

**Historic American Engineering Record
National Park Service
Department of the Interior
Denver, Colorado 80225-0287**

HISTORIC AMERICAN ENGINEERING RECORD

OGDEN ARSENAL, IGLOO TYPE MAGAZINE
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Location: Sycamore Lane, south of Georgia Street, Hill Air Force Base, Layton Vicinity,
Davis County, Utah

UTM: 12-417120-4553310

Date of Construction: 1939

Architect: Unknown

Builder: Unknown

Present Owner: Hill Air Force Base

Present Use: Munitions Storage

Significance: Building 1398 provides particularly vivid insight into the processes involved in the storage of highly explosive components like munitions. In addition, this building contributes to an understanding of the U.S. Army build-up which occurred on the eve of and during World War II.

History: Building 1398 was constructed in 1939 as part of the WPA Arsenal reconstruction after a 1927 windstorm destroyed most of the original Arsenal buildings. It was designed to store 100 pound TNT/Amatol bombs that were produced at Ogden Arsenal.

Igloo Type Magazines such as Building 1398 stored ordnance material and were designed to minimize damage to additional buildings in the event of explosions. The igloo is covered with an earthen mound and separated from surrounding buildings by open land. A concrete apron with a sharp slope upward from the entry made fork lift operations outside igloos like Building 1398 a difficult task, so all ordnance material was loaded by hand until 1943. That year, a process was developed that kept automatic electric fork lift trucks with combination forks inside the igloos while a conveyor track was laid from rail cars or trucks into the doorway. Both small arms ammunition and bombs were handled in this way, which saved approximately one half the time previously used by hand loading alone, with half as many workers.

This igloo is one of 14 such igloos still existing at Hill Air Force Base. The others are Buildings 1395-1399, 1432, 1434, 1435, 1489, and 1495-1499. Electrical wiring and lights were added to these buildings during World War II.

General

Description: Building 1398 (29'-2" x 61'-10") is an example of a Full Trapezoidal Igloo, located in the western edge of the main igloo storage area, originally known as the Magazine Storage and Warehouse Area. This type of igloo consists of a single double door entry, set on a truncated trapezoidal wall which tapers back into an earth mound that covers three of the building's exterior walls. The walls, floor, and roof are made of reinforced concrete. The entry features an explosion-proof door with a mitered top edge. The concrete door frame protrudes slightly from the face of the wall, with the top two edges of the frame slightly overhanging the vertical pieces. A metal vent rises through the earthen mound from the igloo at the east end of the building.

